

ASSIGNMENT

WHEREAS, we, Thomas D. Schneider, of 107 Alessandra Ct. #208, Frederick, MD 21702-4015, a citizen of the United States of America, and Denise Rubens, of 13815 Motters Station Road, Rocky Ridge, MD 21778, a citizen of the United States of America, employees of the Department of Health and Human Services at the time the invention was made, have invented HIGH SPEED PARALLEL MOLECULAR NUCLEIC ACID SEQUENCING for which a provisional patent application has been sent to the Assistant Commissioner for Patents and is identified as U.S. Provisional Patent Application Serial No. 60/151,580 filed August 30, 1999.

WHEREAS, we by virtue of this assignment, and the conditions under which said invention was made are such as to entitle the Government of the United States of America under Paragraph 1(a) of Executive order 10096, to the entire right, title, and interest herein, both domestic and foreign; and

WHEREAS, the Government of the United States of America is desirous of acquiring all domestic and foreign right, title, and interest in the aforesaid invention described in the aforesaid application for Letters Patent of the United States of America; and

NOW, THEREFORE, to all whom it may concern, be it known for and in consideration of the premises and other valuable considerations, we the undersigned, have sold, assigned, and transferred and by these presents do sell, assign, and transfer unto The Government of the United States of America as represented by the Secretary of the Department of Health and Human Services (hereinafter THE GOVERNMENT), and his successors, the full and exclusive right, title, and interest throughout the United States of America, its territories and dependencies, and within each and every foreign country in which THE GOVERNMENT elects to file patent applications on the invention described in the aforesaid application, and all Letters Patents and Registrations which may be granted for corresponding non-provisional patent applications on the same in the United States of America and all countries throughout the world, and to claim the priority from the application as provided by United States law and the Paris Convention, or of any divisional, renewal, continuation in whole or in part, substitution, conversion, reissue, prolongation or extension thereof.

AND, we hereby authorize and request the Assistant Commissioner for Patents to issue said Letters Patent to THE GOVERNMENT as an assignee of the entire right, title, and interest in and to the same throughout the United States of America, its territories and dependencies, and within each and every foreign country in which THE GOVERNMENT elects to file, for the sole use for the full term or terms for which said Letters Patent and Registrations may be granted thereon, or of any division, renewal, continuation in whole or in part, substitution, conversion, reissue, prolongation or extension thereof which may be granted as fully and entirely as the same would have been held by us, had this assignment not been made;

AND, we hereby warrant that there are no outstanding assignments, grants, liens, encumbrances, or agreements either written, oral, or implied with respect to the aforesaid application for Letters Patent which will impair, diminish, limit, or abridge the interest herein conveyed at the time of the execution of this instrument by us;

AND, we hereby agree to execute any and all applications for Letters Patent in the United States of America and foreign countries, and to furnish and deliver to the Secretary, Department of Health and Human Services, upon request, all data and documents, and to execute any papers which may be necessary for the prosecution of any application or applications of Letters Patent or for THE GOVERNMENT to exercise its rights granted hereunder, including communicating to THE GOVERNMENT, its representatives or agents, any facts relating to said invention, including evidence for interference purposes, or for other proceedings, whenever requested, to testify in any interference or other proceedings, whenever requested, and to execute and deliver on request all lawful papers required to make any of the foregoing provisions effective, and likewise make these provisions binding upon our heirs, legal representatives, administrators and assigns, and we shall assist THE GOVERNMENT in every way as may be requested in protecting said invention, provided

that any expense of extending such assistance shall be paid by THE GOVERNMENT.

The undersigned hereby grants the law firm of Klarquist Sparkman Campbell Leigh & Winston, LLP, the power to insert on this Assignment any further identification which may be necessary or desirable in order to comply with the rules of the United States Patent and Trademark Office for recordation of this document.

IN TESTIMONY WHEREOF, Assignors have signed their names on the dates indicated.

Dated: Jan 24, 2000

Thomas D. Schneider
Thomas D. Schneider

STATE OF Maryland)
Frederick) ss.
COUNTY OF ~~Montgomery~~)

This 24 day of January, 2000, before me personally came the above-named Thomas D. Schneider, who executed the foregoing Assignment in my presence, and who acknowledged to me that he executed the same of his own free will for the purposes set forth therein.

Kathy Louise Easterday
Kathy Louise Easterday
Notary Public for Maryland
My commission expires: 8/01/03

[SEAL]

Dated: Jan 24, 2000

Denise Rubens
Denise Rubens

STATE OF Maryland)
Frederick) ss.
COUNTY OF ~~Montgomery~~)

This 24 day of January, 2000, before me personally came the above-named Denise Rubens, who executed the foregoing Assignment in my presence, and who acknowledged to me that he executed the same of his own free will for the purposes set forth therein.

Kathy Louise Easterday
Kathy Louise Easterday
Notary Public for Maryland
My commission expires: 8/01/03

[SEAL]